

Search & Browse

- Simple Search
- Advanced Search
- Browse by Subject
- Browse by Year
- Browse by Conferences/Volumes
- Latest Additions

Information


- Home
- About the Archive
- Archive Policy
- History
- Help
- FAQ
- Journal Eprint Policies
- Register
- Contact Us

News

- Guide to new PhilSci-Archive features.

Mechanistic Information and Causal Continuity

Bogen, Jim and Machamer, Peter (2010) *Mechanistic Information and Causal Continuity*. [Preprint]

 PDF
[Download \(545Kb\)](#) | [Preview](#)

Abstract

Some biological processes (our examples are DNA expression and a reflex response in the leech) move from step to step in a way that cannot be completely understood solely in terms of causes and correlations. This paper develops a notion of mechanistic information that can be used to explain the continuities of such processes. We compare them to processes (including the Krebs cycle) that do not involve information. We compare our conception of mechanistic information to some familiar notions including Crick's idea of genetic information, Shannon-Weaver information, and Millikan's biosemantic information.

Export/Citation: [EndNote](#) | [BibTeX](#) | [Dublin Core](#) | [ASCII \(Chicago style\)](#) | [HTML Citation](#) | [OpenURL](#)
Social Networking: [Share](#) |

Item Type: Preprint

Keywords: information, mechanisms, mechanistic information, DNA expression, sensori-motor reflexes, Krebs cycle, causal explanation, causal continuity, teleology, function.

Subjects: [Specific Sciences > Biology > Neuroscience](#)
[Specific Sciences > Biology > Molecular Biology/Genetics](#)
[General Issues > Causation](#)
[General Issues > Explanation](#)
[Specific Sciences > Biology > Function/Teleology](#)


Depositing [jim bogen](#)
User:
Date 17 Feb 2010
Deposited:
Last 07 Oct 2010 11:19
Modified:
Item ID: 5151
URI: <http://philsci-archive.pitt.edu/eprint/5151>

Actions (login required)

 View Item

Document Downloads

ULS D-Scribe



This site is hosted by the [University Library System](#) of the [University of Pittsburgh](#) as part of its [D-Scribe Digital Publishing Program](#)




E-Prints



Philsci Archive is powered by [EPrints 3](#) which is developed by the [School of Electronics and Computer Science](#) at the University of Southampton. [More information and software credits.](#)

Share

Feeds

 Atom  RSS 1.0
 RSS 2.0

